(19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 5 August 2004 (05.08.2004)

PCT

(10) International Publication Number WO 2004/066204 A1

(51) International Patent Classification7:

G06T 1/00

(21) International Application Number:

PCT/IB2003/006153

(22) International Filing Date:

16 December 2003 (16.12.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 03100127.4

22 January 2003 (22.01.2003)

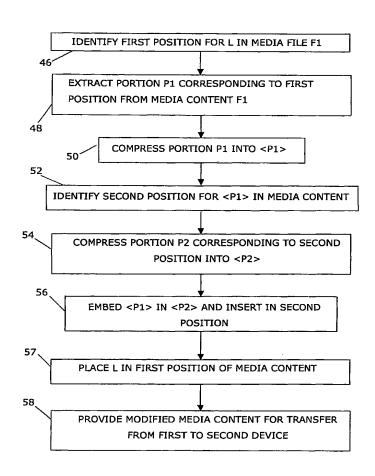
- (71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BRUEKERS,

Alphons, A., M., L. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). VAN DER VEEN, Minne [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven

- (74) Agent: SCHMITZ, Herman, J., R.; Philips Intellectual Property & Standards, Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU. AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH. GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: PERCEPTIBLE REVERSIBLE WATERMARKS



(57) Abstract: The invention relates to methods, devices and a signal, where an encoder compresses a first piece of information in the form of at least a first limited part of an image, provides perceptible additional information (38) related to the image, and provides the compressed first piece of information (40) in the image (36) and a decoder retrieves the image including the compressed first piece of information in the form of at least a first limited part of the image as well as the perceptible additional information, retrieves the perceptible additional information, and decompresses at least the compressed piece of information essentially without losses for provision of at least one of image and perceptible additional information essentially The invention also without losses. relates to an image editor, a computer program product and a computer program element for processing additional information (38) such that the original image is restorable.

